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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,631	11/26/2001	Makoto Hazama	011530	4677

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EXAMINER

LY, CHEYNE D

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/991,631

Applicant(s)

HAZAMA, MAKOTO

Examiner

Cheyne D Ly

Art Unit

1631

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a)  The period for reply expires \_\_\_\_ months from the mailing date of the final rejection.  
b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
- they raise new issues that would require further consideration and/or search (see NOTE below);
  - they raise the issue of new matter (see Note below);
  - they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4.  Newly proposed or amended claim(s) \_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-16.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.  
8.  The drawing correction filed on \_\_\_\_ is a) approved or b) disapproved by the Examiner.  
9.  Note the attached Information Disclosure Statement(s) ( PTO-1449 ) Paper No(s). \_\_\_\_\_.  
10.  Other: See Continuation Sheet

Continuation of 2. NOTE: Specific to claim 1, lines 13-14, the newly amended limitation of "in response to the signal strengths for each of the remaining peaks" raises the issue of new matter. The pointed to disclosure, page 6, line 16, for support discloses "To classify peaks in response to signal strengths" which is different from the limitation of "in response to...for each of the remaining peaks."

Specific to claims 11 and 12, line 2; and claim 13, line 3, the recitation of "limited" directed to "conditions" raises new issues that would require further consideration and/or search. Claims 11-13 are unclear as to what criteria are being used to determine that conditions are limited. The pointed to disclosure, page 8, lines 24-26, does help Applicant resolve the unclarity issue introduced by the term "limited." For example, is the term "limited" being directed to reaction temperature, salt concentration, or the combination?

Continuation of 5. does NOT place the application in condition for allowance because:

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection is maintained with respect to claims 1-16, as recited in the previous office action mailed April 30, 2004.

#### RESPONSE TO ARGUMENTS

Applicant's amendment has not been entered due to the new issues discussed above. Therefore, the non-entry of the amendment leaves claims 1-16 as previously set forth and properly rejected as previously rejected therefore.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. NEW MATTER REJECTION.

This rejection is maintained with respect to claims 1-16, as recited in the previous office action mailed April 30, 2004.

#### RESPONSE TO ARGUMENTS

Specific to claim 5, the pointed to disclosure of "classification of upper four groups having larger peak numbers..." (page 6, lines 22-24) does not provide written description basis for the limitation of "the largest peak numbers."

Specific to claims 6 and 7, the amended limitation of "median values" does not have written description basis as asserted by Applicant to be "a term of the art which characterizes the central physical location values in an array of values" because "array of values" is not recited in claim 1, 6, or 7.

Specific to claim 10, the pointed to disclosure of "optimum matrix value" (page 7, lines 27-28) does not provide written description basis for the limitation of "optimized matrix" because the limitation of a singular "optimum matrix value" is different from the limitation of "optimized matrix."

Specific to claim 16, the pointed to disclosure of page 6, lines 16-28 does not provide written description basis for the limitation of "peaks having abnormal signal strengths are eliminated." Further, Applicant argues that "Inherently, since the peaks..., "such" abnormal peaks have those having abnormal signal strengths." Applicant's argument has been found to be unpersuasive because the assertion that specific limitation is inherent does not satisfy the written description requirement stated above.

Applicant's amendment has not been entered due to the new issues discussed above. Therefore, the non-entry of the amendment leaves claims 1-16 as previously set forth and properly rejected as previously rejected therefore.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. (US Patent No. 4,833,332) taken with Schiemenz et al. (US 5,834,972 A) in view of Anderson (US 5,098,536 A).

This rejection is maintained with respect to claims 1-16, as recited in the previous office action mailed April 30, 2004.

#### RESPONSE TO ARGUMENTS

Applicant argues that "Schiemenz is completely silent as to calculating matrix coefficients based on signals obtained from migration of the actual sample as recited in the present claims" and "Robertson uses a predetermined algorithm that is not modified upon actual sample migration." Applicant's argument has been fully considered and found to be unpersuasive due to said arguments are directed to claims limitations that have been denied entry. Applicant's amendment has not been entered due to the new issues discussed above. Therefore, the non-entry of the amendment leaves claims 1-16 as previously set forth and properly rejected as previously rejected therefore.

Specific to Applicant's argument that "there would have been no motivation to combine Robertson with Schiemenz", Schiemenz, Jr. et al. discloses a general method to signal amplification, and more particularly to an improved method and system having a configurable digital transformer in a hybrid matrix amplifier array (column 1, lines 5-9). While, Anderson discloses a method for improving signal-to-noise in electropherogram (digital signal) (Abstract et al.); and Robertson, Jr. et al. discloses a method of performing signal amplification via a PMT to generate digital signal for sequence determination (column 11, lines 1-36). An artisan of ordinary skill in the art at the time of the instant invention would have been motivated to partake the concept emphasized by Schiemenz, Jr. et al. for an improved method of analyzing digital signal via matrix transformation and by Anderson for a method for improving signal-to-noise in digital signal. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to practice the method of Robertson, Jr. et al. with a transformation matrix for sequence determination as taught by Schiemenz, Jr. et al. and improved signal to noise (removing irregular peak intervals) as taught by Anderson.

## Continuation of 10. Other:

Applicant's claim for priority to Japan 2000-362648, filed November 29, 2000, has been acknowledged. However, the priority benefit to Japan 2000-362648, filed November 29, 2000, has not been granted because Japan 2000-362648 is not in the English language. It is noted that an English language translation of a non-English language foreign application is required in order to grant to a US nonprovisional application priority benefits to a foreign application.

For the instant Application, an English language translation of the priority document is not required for the instant application due to the prior art documents being published before said priority document.

However, if Applicant requires that priority benefit be granted, it is suggested that Applicant provide a certified English language translation of the priority document.

It is noted that claim 15 has not been cancelled due to the non-entry of claim amendment as discussed above.

*Ardin H. Marschel* 6/23/04  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER